DOCUMENT RESUME

ED 231 266 HE 016 252

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TITLE Task Analysis: A Proactive Paradigm.
PUB DATE [83]
NOTE 11p.
PUB TYPE Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Curriculum Design; *Educational Objectives; Higher Education; Information Sources; *Job Skills; Occupational Information; Program Evaluation; *Recreation; *Sequential Approach; Specialists; *Task Analysis; Therapy

ABSTRACT

A sequential and developmental curriculum design is conceptualized, based on task analysis. Task analysis is a detailed inquiry into actions undertaken in performing specific tasks or jobs. Baseline data form a database on which education and training programs are designed, produced, and evaluated. The following are sources of information for task analysis: technical materials (e.g., books, manuals); interviews and discussion with supervisors, workers, and experts; a daily log of specific duties within each job; and observations of practitioners. A flow chart of generic tasks that therapeutic recreation personnel should be able to perform at different educational levels (i.e., entry-level, associate professional, and professional) is presented, along with a functional task analysis approach to curriculum development at the graduate level. The therapeutic recreation field is broken down into seven roles, competencies needed within each area, and job responsibilities. Task analysis applications might include the following: selection of job applicants; development of job descriptions; articulation between educational levels; identification of remedial needs; isolation of education/training objectives; indication of personnel needs; and employee evaluation. (SW)

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TASK ANALYSIS : A PROACTIVE PARADIGM

Robert E. Cipriano, Ed.D.

Present and emerging curricula in higher education should transcend trends in all strata of society. Curricula should be responsive. Personnel interested in providing timely curricula should develop educational offerings within the larger context of what is occurring in society.

SYSTEMS AND STRUCTURES IN AMERICA

- .Violent crime is at an all-time high
- .Vandalism is rampant
- .Pre and extramarital sex has become the norm for males and females
- .During the 1970's birthrate reached an all-time low
- .More divorces and broken families
- .Mind-changing sects -- from EST to Moonies -- on the rise

ALSO

1. Cars and appliances are in constant need of repair; things break as soon as warranties expire
2. Prices keep rising an unemployment gets worse
3. The billions of dollars doled out to people on welfare get spent on shoes and clothing made in Taiwan or Korea while American shoe, clothing, and textile factories go out of business.

SYSTEMS GONE AMOK

- .Bolts supporting Civic Center in Hartford, Ct. snapped and the steel and concrete roof plunged into the 10,000 seat auditorium
- .273 people died when a DC-10 lost an engine while taking off from O'Hare Airport
- .At Three-Mile Island a relief valve got stuck in the open position and almost caused a nuclear meltdown
- .A 45¢ circuit-board in the military computer-alert system signaled that Russia had just launched a missile attack on the United States
- .Across the U.S. 2,500 new Grumman buses, each costing $130,000, broke down
- .Handle on pop-up toasters will not stay down --- or it will stay down and burn toast

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A BETTER TOASTER

We must posess the technical know how to build a good toaster in view of the fact that:

1. We put an entire computer on a thumbnail-size wafer
2. We sent astronauts to the moon
3 We conducted space probes to Saturn

We can logically assume that we do, in fact, have the expertise to "build a good toaster". Why, then, are systems breaking down all around us? Perhaps we have been educated to react to problems after they have actually occured. Engines of air-planes are subjected to more rigorous scrutiny at present than ever before the DC-10 catastrophie. It is a sad commentary that it took a tragedy of this magnitude to provoke people to act as they should have acted prior to this calamity.

SOLUTIONS TO PROBLEMS

People must identify the root courses of problems in order to take corrective action. Analysis of root causes can yield data that can be used to help prevent similar problems from happening in the future. Thus, root cause analysis is a tool for examining situations after errors have occurred. This is a reactive rather than a proactive posture. Many curricula are reactive, not proactive. Task Analysis is used for helping to prevent errors from happening in the first place.

FUNCTIONAL TASK ANALYSIS

Task analysis can be used to aid college personnel responsible for curricula offerings to become more responsive in meeting the needs of the students, as well as constructing specific settings the students indicate an interest in working in.

TASK ANALYSIS: A CONCEPTUAL BASE

What is T.A.?

Task analysis is a detailed inquiry into actions that are taken in performance of specific tasks or jobs.

How is this accomplished?

Make a concrete inventory of what has to be done in order to perform the job.

Why is this done?

Because baseline data are needed. It forms a data base on which education and training programs are designed, produced and evaluated.

WHERE IS INFORMATION FOUND?

The following are sources of information for T.A.:

x Technical materials (e.g. books, articles, manuals, et al.)

x Interviews and discussions with supervisors, workers, experts, et cetera

x Daily Log --- notes of specific duties within each job

x Observations of practitioners -- both great and mediocre

xx If you want to determine what makes a good teacher, find out those tasks a teacher does. Observe a "good" teacher, and a "not-so-effective" teacher. Contrast and compare the differences that exist.

I will allude to the above-indicated concept in the form of a concrete example later in the paper.

Observation of people performing the job, along with scrutinizing critical incidents inherent within their job, should enable curriculum planners to provide viable educational offerings. The following is a list illustrative of critical incidents that may be used by personnel within institutions of higher education:

1. Students switch majors
2. injuries are prevalent
3. staff turnover is high
4. many grievances are filed
5. lower attendance figures at activities
6. students drop out of school
7. practitioners and students drop out of the field
8. students are evaluated poorly in field experiences
9. department faces more budget cutbacks
10. graduates of program are judged poorly on their job
11. department faces significant program cutbacks

Upon analysis and interpretation of some, most, or all of the above-indicated critical incidents, people can make objective decisions regarding the responsiveness of their curriculum offerings. Based upon a content analysis of perceived weaknesses (for example, field experience/practicum components), curricula planners can modify their course content so as to improve in those areas of demonstrable decrepitude (for example, more stringent adherence to at least 350 contact hours of actual field experience instead of the prevailing 200 hours). Thus, people will have the

capability to render decisions predicated upon a series of indicators that measure actual strengths and weaknesses while performing a job.

EFFECTIVE INSTRUCTION

A method for discerning what makes an effective teacher will be analyzed below.

A -- We wish to find out who is a good teacher so we elicit the following critical incident-type information:

1. students formal evaluations
2. students informal comments
3. alumni evaluations
4. alumni informal comments
5. analysis of drop out rate of students in class
6. peer review of teaching
7. analysis of student's challenging grade, teaching methodology, etcetera
8. attendance figures of students in class
9. analysis of addresses delivered
10. graduates are judged to be effective in their jobs.

B -- The same critical incident - type information will be gathered for a teacher judged as "not effective".

C -- Both teachers, the one judged "good" and the one judged "not effective", are observed actually teaching over a period of time.

1. Daily logs are kept

D -- A comparison is made of both individuals.

1. Does one person lecture exclusively for 150 minutes while the other elicits more participation?
2. Does one person always begin the class on time while the other does not?
3. Does one person have a planned introduction to the lesson while the other does not?
4. Does one person have goals and objectives for the lesson while the other does not?
5. Does one person establish a hierarchy of priorities for materials that must be covered while the other person does not?

Upon a comparative analysis of the observed behavior of these teachers we may be able to make a determination of why one person is more effective than the other. We can also build a data base to educate fledging teachers to become effective teachers in the future. Thus, we will be structuring curricula to include those components that enhance quality instruction.

TASK ANALYSIS IN T.R.

The following is a flow chart depicting generic tasks that personnel should be able to perform at six distinct educational levels. Scrutiny of the chart reveals that there are three distinct educational levels: that is, (1) Entry Level, (2) Associate Professional, and (3) Professional. The Entry Level person primarily ASSISTS AND MAINTAINS. This person is either a Therapeutic Recreation Assistant (high school program) or a Therapeutic Recreation Technician I (short term post high school training program). The Associate Professional primarily LEADS and INSTRUCTS. This person is at the junior or community college level, and is acknowledged to be a Therapeutic Recreation Technician II. The Professional Level Category includes the following educational level, generic skills needed, and specific classifications:

A -- Baccalaureate Degree

1. PLANS, CONDUCTS, and ADMINISTERS
2. Therapeutic Recreation Leader
    A. Provisional
    B. Registered

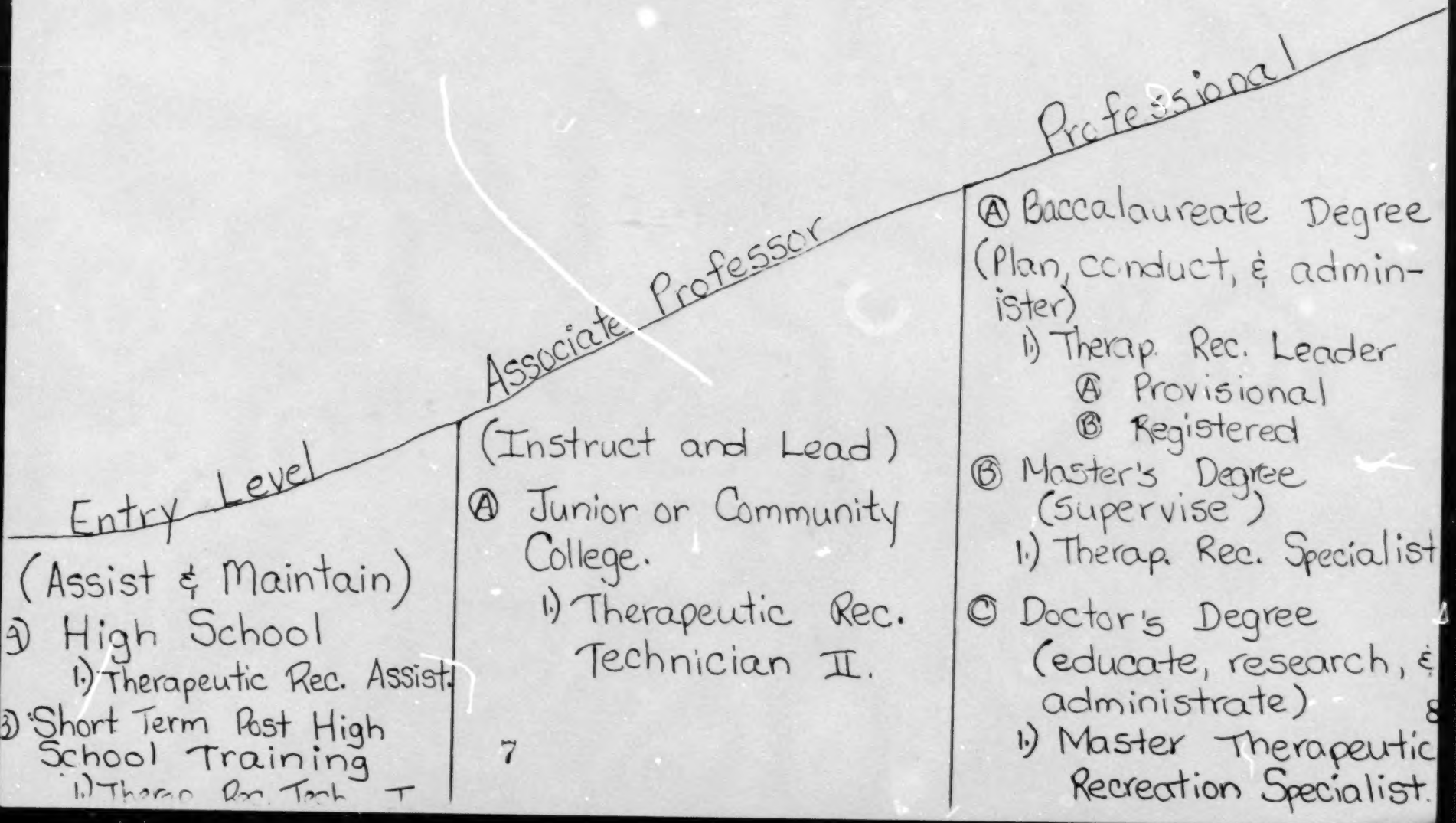
B -- Master's Degree

1. SUPERVISES
2. Therapeutic Recreation Specialist

C -- DOCTOR'S DEGREE

1. EDUCATES, RESEARCHES, and ADMINISTRATES
2. Master Therapeutic Recreation Specialist

A Flow Chart Paradigm Depicting
F.T.A. : Career Levels/ Career Ladder



Following is a complete and composite analysis of the Functional Task Analysis Approach to Curriculum Development at the Graduate Level. At the graduate level, the breakdown of Therapeutic Recreation service into a variety of roles provides for an easily understood comprehension of the specific competencies needed within each of the areas. There are seven roles currently defined; and they are articulated below:

1. Master Leader

   The Master Leader assesses and evaluates clients and interacts purposively with them.

2. Community Coordinator

   The Community Coordinator evaluates programs, overcomes resistance to change in order to adopt the best possible alternative to change.

3. Educator

   The Educator teaches skills, conducts research and evaluation, and directs practicum activities.

4. Supervisor

   The Supervisor oversees the conduct of work performed by staff, evaluates performance levels, handles problems that arise, and works toward maintaining the smooth and orderly flow of work.

5. Administrator

   The Administrator engages in personnel planning and management, develops long-range plans, establishes criteria to assess programs, analyzes trends and determines alternatives for change.

6. Researcher

   The Researcher identifies problems, collects and interprets data and guides in application of appropriate evaluative techniques.

7. Consultant

   The Consultant observes, evaluates programs, and advises on program and facility development and modification. The consultant also evaluates, counsels, refers and disseminates information.

Specific job responsibilities pertaining to the above-indicated role expectations are presented below.

FUNCTIONAL JOB ANALYSES:

.Development of staff and in-service education programs
.Assesses and evaluates clients' participation and progress in therapeutic recreation programs
.Provides leisure education and leisure counseling services
.Plans, coordinates, implements and evaluates therapeutic recreation services
.Conducts needed research and interprets research findings to others
.Interacts purposively with participants, diagnoses needs and interests of participants, and sets viable therapeutic objectives
.Responsible for personnel planning and management
.Engages in fiscal planning and management
.Participates in face-to-face leadership with clients and/or directs staff
.Responsible for serving as an integral member of an interdisciplinary treatment team
.Provides consultation activities
.Directs a therapeutic recreation program in an institution, community, a nursing home, etcetera
.Supervises staff and program
.Prepares annual reports
.Supervises public relations efforts
.Conducts evaluations (e.g. staff, land, et al.)
.Articulates professional issues in the therapeutic recreation field
.Develops departmental policies and practices consistent with the philosophy of the therapeutic recreation department
.Plans, designs, develops, and maintains therapeutic recreation areas and facilities.
.Defines types of programs needed to meet needs of the person (i.e. program self analysis)

USES OF TASK ANALYSIS

The concepts inherent in task analysis can be used in the following areas:

x Selection of applicants for job or training

x Development of job descriptions and specifications

x Articulation between educational levels (e.g. 2 year to 4 year college)

x Identification of deficiency courses to take

x Isolation of essential objectives to be realized by education and training

x Indication of manpower needs

x Selection criteria for short term training programs

x Evaluation of people on-the-job

- x Direction for staff in-service and pre-service
- x Articulation of a continuum and continuity/ sequencing of learning experiences.

FINAL THOUGHTS

I have attempted to conceptualize a curriculum design that is highly sequential and developmental in nature. Thus, each progressive educational level should be predicated upon skills previously indicated in the preceeding level. This hierarchy of functional job tasks should not be viewed as hard-and-fast. Rather, a salient feature of this concept is the fact that it affords curriculum/training GUIDELINES to be followed in an educational and/or on-the-job setting. Because the scope of recreational experiences is such a divergent one, people will be needed at all levels to perform a variety of necessary tasks. People- from the high school para-professional lining a soccer field up to and including the University Professor teaching Recreation Education - are all needed and all have something constructive to offer to the field of recreation.